

Procedures and Guidelines

DIRECTIVE NO. 562-PG-8700.1.1 Rev B
EFFECTIVE DATE: 08/06/1999
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APPROVED BY: original signed by _____
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TITLE: Branch Head _____

Responsible Office: 562/Component Technologies and Radiation Effects Branch

Title: Obtaining Services from the Advanced Component Technologies Group

1 PURPOSE

The purpose of this procedure is to define method for obtaining services (tests, evaluations, custom packaging, etc.) from the Advanced Component Technologies Group in the Component Technologies and Radiation Effects Branch. The Advanced Component Technologies group provides R & D and support services to NASA

2 REFERENCE

GPG 1310.1	Establishing Customer Requirements
GPG 1440.7	Control of Quality Records
GPG 8700.1	Design Planning and Interface Management
562-PG-1310.1.1	Customer Agreements
562-WI-8700.1.1	Generating Work Requests For The Advanced Components Technology Lab

3 SCOPE

The scope of this procedure is the processes and procedures performed within the Code 562 facilities. These include:

- a. Failure Analysis (FA)
- b. Destructive Physical Analysis (DPA)
- c. Electrical Characterization
- d. Custom Packaging
- e. Non-destructive Evaluation (NDE)
- f. Photodocumentation
- g. Other Services

4 DEFINITIONS

For definitions of PARTS, EEE PARTS, and ELECTRONIC PACKAGING, see 562-PG-1310.1.1

- a. **FAILURE ANALYSIS.** One or more tests and/or examinations of a failed item to determine the cause of the failure and/or the extent of damage.
- b. **DESTRUCTIVE PHYSICAL ANALYSIS.** Processes, by which items are disassembled, decomposed or otherwise de-constructed for the purpose assessing the manner and quality of the original item.

- c. **ELECTRICAL CHARACTERIZATION.** Determination of the electrical behavior of an item, usually an EEE part or a material constituent of an EEE part.
- d. **CUSTOM PACKAGING.** Assembly of EEE parts into a package in accordance with a specific customer's requirements.
- e. **NON-DESTRUCTIVE EVALUATION.** Processes, by which items are evaluated and examined without permanent damage.
- f. **PHOTODOCUMENTATION.** Creation of a photographic record of one or more related examinations.
- g. **OTHER SERVICES.** Any service performed for a customer not covered by one of the above categories.

5 AUTHORITIES AND RESPONSIBILITIES

Only activities covered by a valid GSFC JON (charge number) shall be performed. It is the responsibility of the responsible Code 562 civil servant to ensure that a valid charge number exists. If the activity requires the use of contract labor, the responsible Code 562 civil servant shall ensure that sufficient funds have been authorized for the task and the proper authorizing documents (work requests, task statements, etc.) are in place.

6 IMPLEMENTATION

6.1 Initiation. Any entity or individual with sufficient funds may initiate work request. The required activity shall be described in whatever manner is appropriate. Any member(s) of the Group with sufficient technical understanding may accept the work and perform the necessary activities. The flow chart in Figure 1 depicts the typical route by which technical activities flow the lab.

6.2 Work Requests. Any job or activity requiring a written report, delivered hardware, or photodocumentation requires a Work Request. Either the customer or responsible Code 562 personnel may complete the Work Request.

6.3 Data Retention. Completed Work Requests and associated documentation, computer files, etc. will be retained in the Code 562 Records Vault.

6 RECORDS

Quality Record	Record Custodian	Retention
Work request	562 personnel	2 years
Customer agreement	562 task manager	2 years

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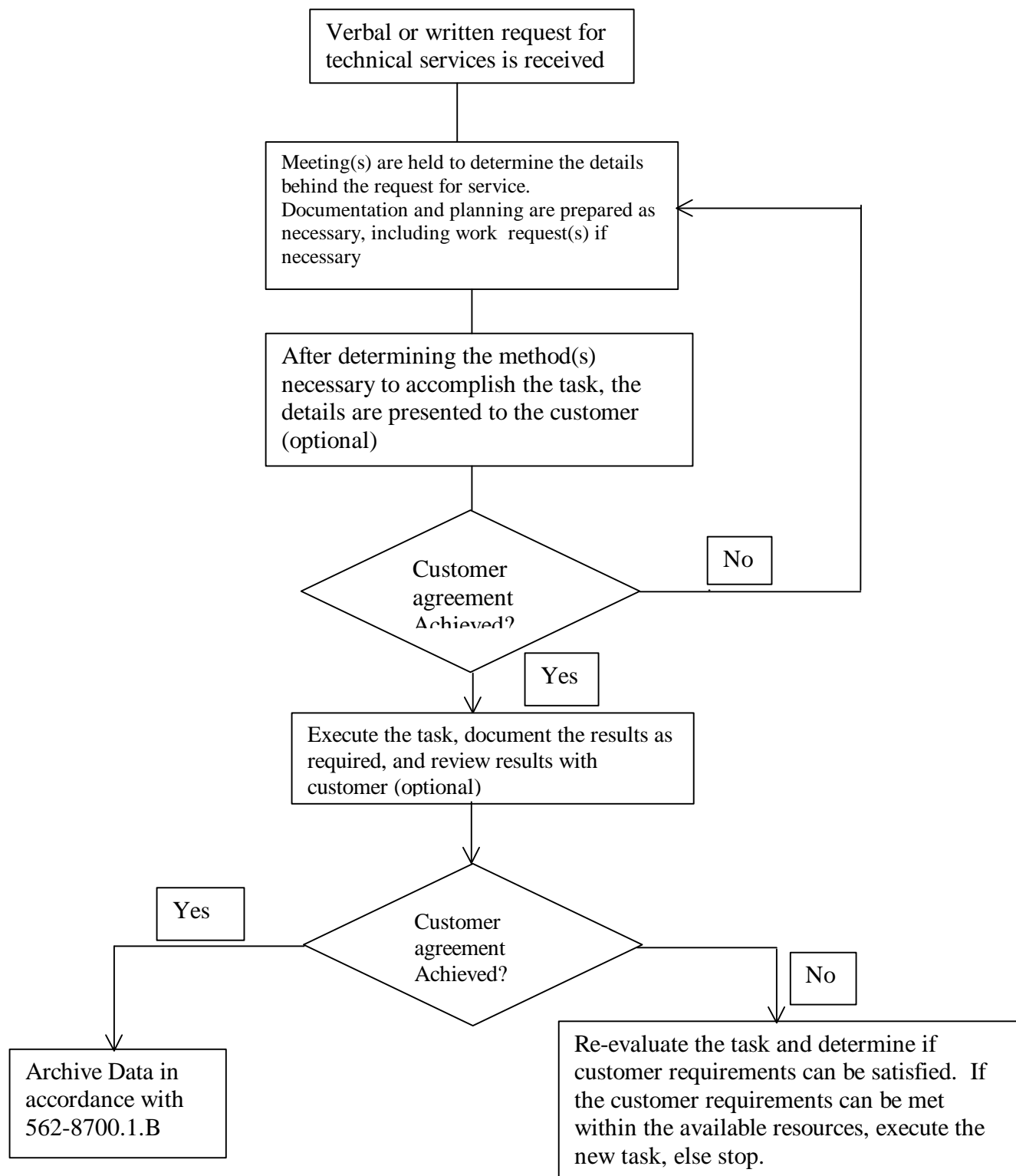


Figure 1
Code 562 Work Flow

CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	09/29/1998	Initial Release
A	02/09/1999	Add reference documents
B	08/06/1999	Add quality records